

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

ADVOCACIA PIETRO ARIBONI S/C  
RUA GUARARAPES, 1909, 7° ANDAR  
BROOKLIN  
04561-004 SAO PAULO  
BRASIL - (BR)

PCT

WRITTEN OPINION

(PCT Rule 66)

Date of mailing  
(day/month/year) 30 August 2004 (30.08.2004)Applicant's or agent's file reference  
38145

REPLY DUE

within 2 months/days from  
the above date of mailingInternational application No.  
PCT/BR 2003/000089International filing date (day/month/year)  
8 July 2003 (08.07.2003)Priority date (day/month/year)  
8 July 2002 (08.07.2002)International Patent Classification (IPC) or both national classification and IPC  
IPC<sup>7</sup>: C12N 1/19, C12N 1/21Applicant  
SALINBAR S.A.

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
  - I. ☒ Basis of the opinion
  - II. ☐ Priority
  - III. ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV. ☐ Lack of unity of invention
  - V. ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI. ☐ Certain documents cited
  - VII. ☐ Certain defects in the international application
  - VIII. ☐ Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.
 

**When?** See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 08.11.2004.

Name and mailing address of the IPEA/AT  
Austrian Patent Office  
Dresdner Straße 87, A-1200 Vienna

Authorized officer

MOSSER R.

Facsimile No. 1/53424/200

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Form PCT/IPEA/408 (cover sheet) (July 1998)

## WRITTEN OPINION

International application No.  
PCT/BR 2003/000089

**I. Basis of the opinion****1. With regard to the elements of the international application:\***

☒ the international application as originally filed

☐ the description:

pages , as originally filed  
pages , filed with the demand  
pages , filed with the letter of

☐ the claims:

pages , as originally filed  
pages , as amended (together with any statement) under Article 19  
pages , filed with the demand  
pages , filed with the letter of

☐ the drawings:

pages , as originally filed  
pages , filed with the demand  
pages , filed with the letter of

☐ the sequence listing part of the description:

pages , as originally filed  
pages , filed with the demand  
pages , filed with the letter of

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:**

☐ contained in the international application in printed form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☐ The amendments have resulted in the cancellation of:**

☐ the description, pages

☐ the claims, Nos.

☐ the drawing(s), sheets/fig

**5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed".

## WRITTEN OPINION

International application No.  
PCT/BR 2003/000089

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1. Statement	Novelty (N)	Claims 1-187	YES
		Claims ----	NO
	Inventive step (IS)	Claims ----	YES
		Claims 1-187	NO
	Industrial applicability (IA)	Claims 1-187	YES
		Claims ----	NO
Citations and explanations			
<p>The following documents have been cited in the Search Report:</p> <p>D1: BR 200001122 A - WPI-abstract  D2: WO 99/60138 A2  D3: US 5866374 A  D4: US 5585271 A</p> <p>Claims 1-187 concern genetically modified microorganisms which have promoter regulated flocculation genes. The flocculation is regulated by the environment of the cells. Further, the claims concern fermentation processes using such microorganisms, plasmids, vectors and expression cassettes. The claims are not restricted to specific microorganisms, fermentation processes using such microorganisms, plasmids, vectors and expression cassettes. The specification just concerns desired products and desired effects. There are not any examples which support the very broad claims.</p> <p>Flocculating microorganisms which are derived from non-flocculating strains and flocculating genes with their promoters are disclosed in D1. D2 concerns methods of regulating cell flocculation whereby the flocculation is induced by the growth medium. A person skilled in the art will take the information and technical features from D1 and D2 and come to the subject-matters of the claims 1-187.</p> <p>D3 discloses the transformation of yeasts with Lg-FL01 DNA which enables the production of yeast strains in which flocculability has been introduced or enhanced. Also this document reveals the idea that flocculation is inducible with biotechnological methods. The flocculating is regulated by the medium. D4 reveals a further agglutination gene and further genetic tools for the insertion of such a gene into a cell. It is obvious from D3 and D4 that it should be possible to bring different agglutination genes in microorganism. Thus, the subject-matters of claims 1-187 are obvious. Industrial applicability is given for the subject-matters of all claims.</p>			